UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

DEC 9 1996

000107995

Ms. Gail S. Hill, Acting Group Lead
Regulatory Liaison Group
Rocky Flats Field Office
Department of Energy
Rocky Flats Field Office
P.O. Box 28
Golden, CO 80402-0928

RE: Proposed Action Memorandum for the Source Removal at the Mound Site

Dear Ms. Hill:

We have reviewed the Proposed Action Memorandum (PAM) for the Mound Site, which we received on November 26, 1996, and after consultation with the Colorado Department of Public Health and the Environment, are transmitting our comments for your consideration. We are awaiting the Field Sampling Plan for the Mound Site, so please be aware that further comments may occur following receipt of this document. We request submittal of cost estimates for this project either in this PAM, or through another mechanism, concurrent with the finalization of the PAM.

Please contact Jean Lillich if you have any questions concerning the enclosed comments or if you would like to schedule a meeting to discuss our concerns further.

Sincerely,

Tim Rehder

Tim Rehder
Rocky Flats Team Leader

Enclosure

cc: Steve Slaten, DOE
Steve Tarlton, CDPHE
Carl Spreng, CDPHE

Dec 18 → Jan 14

Y5

ADMIN RECORD

I113-A-00046

Printed on Recycled Paper

COMMENTS ON
DRAFT PROPOSED ACTION MEMORANDUM FOR THE SOURCE REMOVAL AT THE MOUND SITE

1. Page 2, Project Description Section 2.0: The first paragraph lists several documents in which information has been documented for operable unit 2. In reviewing the list provided, we have discovered information which is missing from our files, and are requesting a copy of the following: *Soil Vapor Survey Report for Operable Unit 2 Subsurface Interim Remedial Action* (EG&G, 1994), and Figures 3.13-2 and 3.13-3 of the *Draft Trenches and Mound Site Characterization Report* (RMRS, 1996a). We also are not aware of a separate report entitled *Results of the 1996 Pre-Remedial Investigation of the Mound Site* (RMRS, 1996b). Please provide this document as well, if it is separate from the Draft Characterization Report listed above.

2. Page 10, Radionuclides in Soil Section 2.3.2: This section describes radionuclide evaluation criteria, however, does not address radiological field screening procedures during the actual excavation. The PAM must include steps for screening excavated soils for radionuclides, methods for segregating and storage of any excavated soils which exceeds 5000 cpm (measured by field instrumentation), and procedures for sampling and analysis and ultimate disposition of any soil which exceeded this standard.

3. Page 11, Table 2-3 and 2-4: The total Tier II sum-of-ratios in Table 2-4 indicates a total dose greater than 50% of the annual limit. Using the results from borehole 14295, the Tier II sum-of-ratios total is greater than 1. Table 2-4: The values in the "Tier I Ratio" column do not add up to the indicated total. The Am-241 value appears to be the problem. Please correct this.

4. Page 11, Project Approach Section 3.0: Please clarify that there are no proposed action objectives with respect to radionuclides, i.e. that the proposed treatment does not affect radionuclide levels.

5. Page 12, Proposed Action Section 3.2: This section states that the soil will be temporarily stockpiled, awaiting thermal desorption processing in an area 600 feet east of the Mound Site, and references Figure 2-1. Please provide a map which further delineates the precise stockpile location as this was not clearly delineated.

6. Page 12, Excavation Section 3.2.1: In the discussion of dust control and air monitoring, use of the samplers in the Mound Area (S106, S107, S109, and S119) should be required. Based on experiences with the T3/T4 excavations, weekly analysis for uranium should occur. Data from these referenced RFETS samplers and the CDPHE sampler near the trench site indicated that the earth moving activities caused a resuspension of uranium at levels even higher than those caused by the contaminated drum incident. In addition, more information concerning the referenced dust minimization techniques needs to be provided.

The text should state whether the organic vapor analyzer used to guide excavation activities is capable of detecting the organic contaminants of concern with the accuracy and precision required to determine if the cleanup target levels have been met.

Paragraph 2: This paragraph states that earth-moving operations will not occur during periods of high winds. Please describe the criteria for the term "high winds", i.e. what wind speeds?

7. Page 12, Excavation Section 3.2.1, Paragraph 3: This paragraph generally describes post-excavation sampling to be conducted in the trench citing the Sampling and Analysis Plan (SAP). Very little detail was provided in the PAM, thus further comments concerning this section may occur following evaluation of these sampling details.

8. Page 13, Excavation Section 3.2.1: Please provide an estimate of the volume of incidental groundwater expected during this excavation based upon the maximum groundwater expected at the wettest time of the year.

9. Page 14, Staging of Contaminated Soils Section 3.2.2 and Treatment Section 3.2.3: These sections describe both staging and treatment methods for the contaminated soils, however, it is not clear what timeframe is planned from excavation to treatment. We recommend that stockpiling be kept to a minimal amount by performing thermal desorption concurrent with excavation activities. Please describe management practices to ensure storage at the Contaminated Soil Feed Stockpile (CSFS) will be kept to a minimum. Also, a description of the staging of treated soils which are awaiting final laboratory results is requested.

This section also describes the use of a water resistant tarpaulin to prevent dispersion. Please clarify how this tarp will be secured to ensure it remains intact during high winds.

Also in Section 3.2.3, there is no detail concerning the thermal desorption process. Please provide these details which were included in the Ryan's Pit PAM, or at a minimum reference appropriate documents.

10. Page 15, Table 3.2 TDU Performance Standards: Performance standards listed in this table mirror Tier I action levels for subsurface soils, however, due to the type of waste present, i.e. listed hazardous waste, more stringent performance standards must be targeted in order to allow the materials to be disposed of in an area which does not meet minimum technology requirements. Therefore, the following performance standards, meeting approximately a 10-5 risk range should be used as target concentrations:

Carbon Tetrachloride:	.6 mg/kg
Methylene Chloride:	.577 mg/kg
PCE	.6 mg/kg
TCE	.6 mg/kg

3

11. Page 15, Worker Health and Safety Section 3.3: It is unclear whether the Activity Hazard Analysis will be part of the Health and Safety Plan. It should be clear from this analysis what field conditions constitute the planned approach, how those conditions will be evaluated (i.e. qualitatively and quantitatively) and what the acceptable variances are from the planned approach. Please provide this information.

No description is provided for the field radiological screening process or the types of instruments and measurements to be used to detect surface contamination and airborne radioactivity.

The PAM states that data and controls will be continually evaluated, but does not state the frequency of evaluation, the criteria for evaluation, or the corrective actions that might result if the information varies from the planned approach. This section also does not identify which positions will perform the evaluation, their functional areas, or their relationship to the project manager or project coordinator.

12. Page 16, Waste Management Section 3.4, Paragraph 1: This paragraph states that additional sampling for radioisotopes will be performed if direct monitoring indicates that radionuclides are present above "expected levels". Please see Comment #2 above; these procedures need further elaboration.

Paragraph 2 and 3 of this section discuss ancillary wastes and residual materials, however no specifics is provided concerning criteria for characterization and locations or categories for disposal. Please provide this information.

13. Page 16, Waste Management Section 3.4, Paragraph 3: This paragraph describes characterization methods of the residual materials and the third sentence of Page 14, Treatment Section 3.2.3, Paragraph 2 states that "If organic phase liquids are recovered from the condenser, these liquids will be containerized for offsite disposal". These sections warrant clarification. Please clarify how the organic phase liquids will be managed, and further elaborate on methods of generation (i.e. what unit in the process). The residuals from treatment of a listed waste are clearly a hazardous waste and must be managed accordingly. This requirement, per the 'derived from rule' is addressed in 40 CFR 261.3(c)(2)(I) which states that any solid waste generated from the treatment, storage or disposal of a hazardous waste is itself a hazardous waste.

14. Page 18, Action Level Framework Section 5.1.2: This section states that Tier I subsurface soil action levels for VOC's were adopted as cleanup target levels. See comment #10.

15. Page 19 and 29, Land Disposal Restrictions Section 5.2.3: This section discusses applicability of the land disposal restrictions. See comment #10 above concerning target levels; more stringent levels may be assigned to constituents of concern to ensure protectiveness of disposal in an unlined landfill.

Also, the second paragraph states that "when the condensate is transferred to the CSTF (Building 891) for treatment, RCRA is no longer applicable or relevant and appropriate because of the Waste Water Treatment Exclusion". Please provide further justification for classifying the condensate as waste water.

16. Page 20, Contaminated Soil Feed Stockpile (CSFS) as a Corrective Action Management Unit (CAMU) Section 5.2.4: This PAM seeks to classify the CSFS as a CAMU, however, the CAMU classification carries certain connotations which may not necessarily apply in this case. We believe that the CSFS can be classified as a waste pile and such requirements shall be met to the maximum extent practicable. Please provide further clarification for utilizing the CAMU classification, otherwise revise this section to reflect addressing substantive requirements for the temporary waste pile.

17. Page 21, Table 5-1: This table lists inspection requirements as one of the RCRA Subpart B substantive requirements. Further information concerning inspection frequency not only of the equipment but also the CSFS during operations (daily), and associated structures must be included.

18. Page 22, Table 5-2: This Table states that the CSFS will be placed at a location previously used for the same purpose. Please provide further information concerning this location, i.e. when and how it was used, and type and extent of verification sampling performed.

19. Page 23, Temporary Unit Tank and Container Storage Section 5.2.6, and Page 24, Closure Requirements Section 5.2.7: It is unclear in these sections what the number and types of containers and storage units are to be utilized. Please provide further information concerning purpose and types of such units.

20. Page 24, Closure Requirements Section 5.2.7, Paragraph 5: This paragraph references decontamination procedures, however, fails to provide methods for analyzing the waste water generated.

21. Page 24, Closure Requirements Section 5.2.7: There is no discussion of performance monitoring with regard to the associated groundwater plume. Please identify which wells will serve to monitor performance and discuss how this will be measured.

22. Page 25, VOC and Particulate Emission Controls Section 5.2.8: The Air Quality Control Commission's Regulation No. 3, specifically Appendices A and B, need to be considered, since both Ccl and PCE are Bin A pollutants subject to a 250 lb/yr limitation.

5/6